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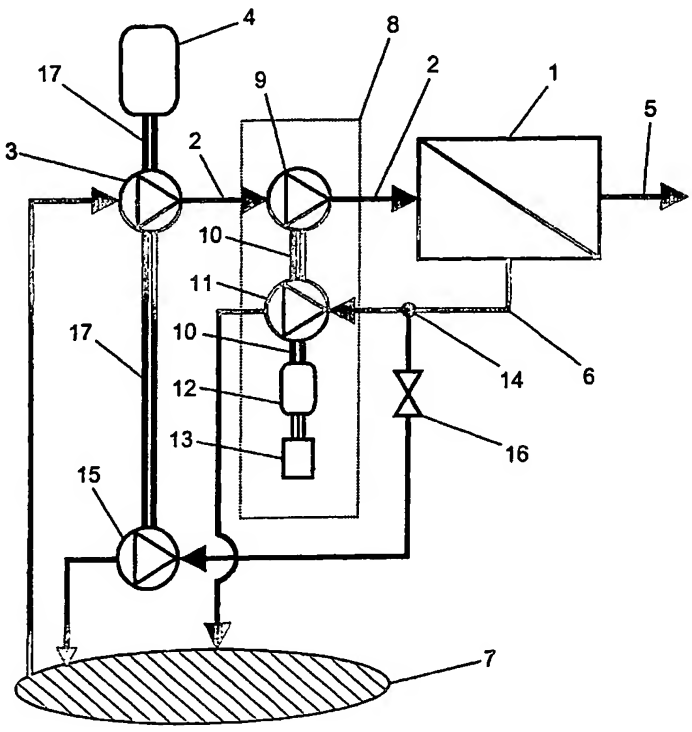
(54) Title: WATER DESALINATION INSTALLATION



(57) Abstract: The invention relates to a water desalination installation for the desalination of seawater according to the reverse osmosis method. This installation comprises at least one membrane module (1) that is connected with a raw water feed line (2), via which raw water is supplied by means of a high-pressure pump (3); with a permeate line (5), via which the desalinated water is discharged; and with a concentrate line (6), via which concentrated salt water is discharged. For permitting the pressure to be adapted in the raw water feed line (2) to the salt content and the temperature of the water to be desalinated, and for increasing at the same time the energy efficiency of such a water desalination installation, the invention proposes that provision is made for an energy recovery unit (8) that comprises a motor-driven pressure booster pump (9) arranged in the raw water feed line (2) either before the high-pressure pump (3) or between the high-pressure pump (3) and the membrane module (1); and a turbine (11) that is arranged in the concentrate line (6) and mechanically coupled with the pressure booster pump (9).

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